# DELAWARE RIVER TRENTON TO MARCUS HOOK

#### REFERENCE TIDE GAUGE - PHILADELPHIA

The Philadelphia tide gauge is located on the Delaware River near the east end of Washington Avenue.

High tide at Trenton, New Jersey occurs about 1¼ hours later than the high tide at Philadelphia. Low tide is around 1¾ hours later.

High tide at Marcus Hook, Pennsylvania occurs about 1½ hours earlier than the high tide at Philadelphia. Low tide is around 1¼ hours earlier.

## **Mercer County**

In the minor range, there are no known tidal flooding problem areas in Mercer County. However, tidal effects may worsen river and creek flooding caused by heavy rainfall or snowmelt.

# **Bucks County**

In the minor range, there are no known tidal flooding problem areas in Bucks County. However, tidal effects may worsen river and creek flooding caused by heavy rainfall or snowmelt.

#### In the moderate range:

Flooding occurs around Radcliffe Street and Mill Street in Bristol.

Flooding occurs in Bristol Township near the mouth of the Neshaminy Creek.

#### **Burlington County**

Note: For eastern Burlington County refer to Ocean County.

# In the upper part of the minor range:

Flooding occurs along Delaware Avenue West in Burlington City near Wood Street.

In Burlington Township, flooding occurs along Tanner's Run near the intersection of US Route 130, Beverly Road and Devlin Avenue.

In Delanco, flooding occurs on the access road to the Riverside Bridge (Burlington Avenue).

Flooding occurs around the Centerton Road bridge (Burlington County Route 635) over the Rancocas Creek. The bridge connects Willingboro and Westampton Township with Mount Laurel Township.

Flooding occurs around River Drive in Riverside and Delran.

In Moorestown, flooding occurs along the North Branch of the Pennsauken Creek below the Strawbridge Lake Dam.

\*Prolonged periods of westerly winds tend to prevent the Rancocas Creek from draining into the Delaware River. This may result in flooding in Moorestown along Kendles Run (especially at Creek Road) and along Parkers Creek.

## In the moderate range:

Flooding occurs around Kern Street, Zeisner Avenue and River Road in Cinnaminson. Flooding occurs along the Pompeston Creek in Cinnaminson and Riverton.

## Philadelphia County

# In the lower part of the minor range:

Flooding occurs at the east end of Linden Avenue in the Northeast. There is a large parking lot at that location.

Flooding occurs at the former Navy Shipyard from both the Delaware River and the Schuylkill River.

# In the upper part of the minor range:

Flooding occurs along Delaware Avenue at Race Street (near the Ben Franklin Bridge). Generally, it is not a case of the river spilling over onto the roadway. The flooding problems tend to occur when the river is high and water begins to backup into the storm drains.

## In the moderate range:

Flooding occurs along Columbus Boulevard from Spring Garden Street to Washington Avenue.

#### Camden County

## In the lower part of the minor range:

In Camden, flooding occurs along Admiral Wilson Boulevard (US Route 30) and Baird Avenue as the Cooper River overflows.

## In the moderate range:

Water backs up into Cooper River Lake.

Flooding occurs on North Park Drive in Pennsauken.

Flooding occurs on South Park Drive in Collingswood and Haddon Township.

Flooding occurs along the Little Timber Creek between Gloucester City and Brooklawn.

Flooding occurs in Brooklawn around the Brooklawn Circle.

#### Gloucester County

# In the lower part of the minor range:

Flooding occurs along the Nehonsey Brook in Greenwich Township (Gibbstown) at South Poplar Street and Democrat Road.

The Repaupo Creek overflows onto Flood Gates Road in Greenwich Township and Logan Township. There is a floodgate at the mouth of Repaupo Creek, where it empties into the Delaware River.

# In the upper part of the minor range:

In Westville, flooding occurs along Timber Avenue, Edgewater Avenue and NJ Route 47 as the Big Timber Creek overflows its banks.

Flooding occurs along Woodbury Creek and Hessian Run in West Deptford Township.

## In the moderate range:

Flooding occurs along Woodbury Creek in Woodbury.

Flooding occurs along Mantua Creek.

Flooding occurs along High Hill Road and Center Square Road in Logan Township.

Flooding occurs along US Route 130 at Oldmans Creek.

#### **Delaware County**

# In the upper part of the minor range:

Flooding occurs in Tinicum Township between Philadelphia International Airport and Essington.

## Data Acquisition

In order to access data from the Philadelphia gauge, use the National Ocean Service web site at <a href="http://tidesonline.nos.noaa.gov/">http://tidesonline.nos.noaa.gov/</a> or the Advanced Hydrologic Prediction Service site at <a href="http://water.weather.gov/ahps2/index.php?wfo=phi">http://water.weather.gov/ahps2/index.php?wfo=phi</a>.

#### REFERENCE TIDE GAUGE - PHILADELPHIA

The tide heights from actual events referenced in the following table are those that were verified by the National Ocean Service.

THE PERIOD OF RECORD FOR THE PHILDELPHIA GAUGE BEGINS IN JULY 1900. PLEASE NOTE THAT THERE ARE GAPS WITHIN THE PERIOD OF RECORD DUE TO EQUIPMENT OUTAGES AND/OR DATA AVAILABILITY.

READINGS FROM JULY 1900 THROUGH DECEMBER 1989 ARE FROM THE OLD GAUGE AT PIER 11. READINGS FROM JANUARY 1990 TO THE PRESENT ARE FROM THE GAUGE AT THE COAST GUARD STATION. A CORRECTION OF -0.09 FEET WAS APPLIED TO THE PIER 11 DATA TO MAKE IT CONSISTENT WITH THE COAST GUARD STATION DATA.

#### ALL HEIGHTS ARE IN MEAN LOWER LOW WATER (MLLW).

- 10.6 FT October 30, 2012 (Post Tropical Cyclone Sandy).
- 10.5 FT November 25, 1950 / April 17, 2011.
- 10.4 FT December 21, 2012.
- **10.2 FT MAJOR TIDAL FLOODING BEGINS.** October 25, 1980.
- 10.1 FT August 23, 1933 (Hurricane).
- 9.9 FT August 20, 1955 (Hurricane Diane) / February 26, 1979 / August 28, 2011 (Hurricane Irene) / May 1, 2014.
- 9.8 FT April 2, 2005.
- 9.7 FT December 11, 1992.
- 9.6 FT June 30, 1973 / September 29, 2011.
- 9.5 FT November 28, 1993 / September 19, 2003 (Hurricane Isabel) / April 19, 2007.
- 9.4 FT October 15, 1954 (Hurricane Hazel) / March 7, 1962 / June 29, 2006.
- 9.3 FT October 17, 1955.
- 9.2 FT MODERATE TIDAL FLOODING BEGINS.

  January 25, 1979 / January 19, 1996 / December 14, 2003 /

  March 29, 2010.
- 8.5 FT COASTAL FLOOD ADVISORY THRESHOLD.
- 8.2 FT MINOR TIDAL FLOODING BEGINS.
- -2.0 FT LOW WATER STATEMENT THRESHOLD.
- -3.0 FT April 6, 1943 / December 22, 1976 / November 14, 2003 / January 3, 2010.
- -3.1 FT January 26, 1928 / February 1, 1932 / March 28, 1955 / February 6, 1979 / January 17, 2000.
- -3.2 FT January 6, 1927 / January 30, 1934 / February 14, 1942 / February 8, 1943 / February 15, 1946 / February 10, 1947 / March 3, 1950 / February 10, 1958 / February 5, 1995 / January 15, 2006.
- -3.3 FT December 8, 1939 / February 24, 1963 / February 25, 1967 / February 25, 1990 / March 6, 2007.
- -3.4 FT February 15, 1923 / January 21, 1929 / November 30, 1958 / December 18, 1964 / January 15, 1979 / March 15, 1993 / February 15, 2015.

- -3.5 FT October 30, 1925 / December 8, 1931 / December 11, 1943 / December 18, 1972 / December 7, 1983.
- -3.6 FT December 28, 1925 / February 5, 1972.
- -3.7 FT March 19, 1941 / April 4, 1975 / February 8, 1985.
- -3.8 FT January 27, 1971 / December 4, 1980 / April 7, 1982.
- -3.9 FT March 11, 1929 / February 15, 1938 / February 4, 1969.
- -4.1 FT January 6, 1959 / March 8, 1986.
- -4.2 FT March 8, 1932.
- -4.4 FT November 21, 1989.
- -4.5 FT January 25, 1939.
- -4.8 FT December 23, 1946.
- -5.2 FT January 25, 1945.
- -6.8 FT December 31, 1962.